Algebra 1 … Readiness Test 1

Integers – sample questions:

1. 8 – (6 – 9) =

    A.   11   B.   7   C.   5   D.   –5

2. Mike received a check for $215. He deposits all the money into his bank account and his new balance is $2,184. What was his balance before he made the deposit?

    A. $969   B. $1,869   C. $1,969   D. $2,399

3. What number multiplied by 8 gives –24?

    A.   16   B.   –32   C.   3   D.   –3

4. Find the prime factorization of 30.

    A.   2 x 15   B.   3 x 10   C.   2 x 3 x 5   D.   2 x 5 x 5

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Integers   (1) A   (2) C   (3) D   (4) C

Fractions – sample questions:

5. $\dfrac{3}{4} + \dfrac{2}{3} =$

    A. $\dfrac{7}{6}$ B. $\dfrac{5}{12}$ C. $\dfrac{17}{12}$ D. $\dfrac{5}{2}$

6. $\dfrac{7}{15} \times \dfrac{5}{14} =$

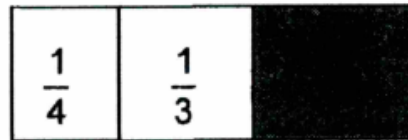   A. $\dfrac{1}{6}$ B. $\dfrac{1}{5}$ C. $\dfrac{1}{15}$ D. $\dfrac{7}{25}$

7. What fraction of the figure is shaded?

    A. $\dfrac{6}{7}$ B. $\dfrac{4}{7}$ C. $\dfrac{7}{12}$ D. $\dfrac{5}{12}$

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Fractions   (5) C   (6) A   (7) D

Decimals – sample questions:

8. 6.8 + .37 =

   A. 10.5   B. 7.57   C. 7.17   D. 8.17

9. What percent of 180 is 36?

   A. 20%   B. 50%   C. 200%   D. 500%

10. Write as a decimal: 7%

   A. 70.0   B. 7.0   C. 0.7   D. 0.07

11. Arrange the following numbers in order from smallest to largest
    $\frac{1}{4}, \frac{1}{5}, 0.24, 0.26$

   A. $\frac{1}{4}, 0.24, 0.26, \frac{1}{5}$ B. $\frac{1}{4}, \frac{1}{5}, 0.24, 0.26$ C. $\frac{1}{5}, \frac{1}{4}, 0.24, 0.26$ D. $\frac{1}{5}, 0.24, \frac{1}{4}, 0.26$

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Decimals   (8) C   (9) A (10) D (11) D

Exponents& Square Roots – sample questions:

12. $4^3 \cdot 4^6 =$

    A. 4^9 B. 4^{18} C. 16^9 D. 16^{18}

13. $(3.1)^2 + (.3)^2 =$

    A.   11.56   B.   10   C.   9.7   D.   9.619

14. $\sqrt{3^4} =$

    A.   7   B.   9   C.   18   D.   81

Algebra 1 … Readiness Test 1

Exponents, Square Roots   (12) A   (13) C   (14) B

Simple Equations & Operations with Literal Symbols – sample questions:

15. Solve: $4x + 7 = 23$

    A.　4　　　　　B.　7　　　　　C.　16　　　　　D.　30

16. If $n = r + 5$ and $r = 3$, then $n =$

    A.　2　　　　　B.　4　　　　　C.　8　　　　　D.　-2

17. Write an equation which says that distance d equals the product of rate of travel r and time traveled t.

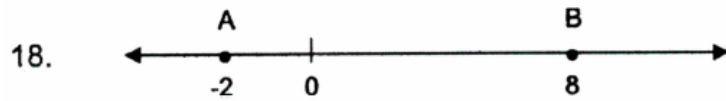   A.　$d \times t = r$　　　　B.　$t = r \times d$　　　　C.　$d = t \times r$　　　　D.　$r = t \times d$

Algebra 1 … Readiness Test 1

Equations with Literal Symbols   (15) A   (16) C   (17) C

Geometry and Graphing – sample questions:

18.

A ———————— B
←————•————|————————•————→
        -2   0   8

On the number line above, what is the distance between points **A** and **B**, and what number represents the point half the distance between points **A** and **B**?

A. distance is 6:   B. distance is 6,   C. distance is 10,   D. distance is 10,
   midpoint is 3   midpoint is 1   midpoint is 0   midpoint is 3

19. What is the radius of a circle whose area is 64π?

A.   8   B. 8π C.   32   D.   64

20. What is the length of the third side of a right triangle with a hypotenuse of 5 and one leg equal to 3?

A.   8   B.   15   C.   4   D.   16

Algebra 1 … Readiness Test 1

Geometry & Graphing (18) D (19) A (20) C